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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,030	10/10/2001	Fabien Buda	JNP-0186	7530
44987	7590	04/04/2006	EXAMINER	
HARRITY SNYDER, LLP 11350 Random Hills Road SUITE 600 FAIRFAX, VA 22030			KIM, KEVIN	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,030

Applicant(s)

BUDA, FABIEN

Examiner

Kevin Y. Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 1-25-2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19 is/are allowed.
- 6) ☒ Claim(s) 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The indicated allowability of claims 20-26 is withdrawn in view of the newly discovered reference(s) to US Patents Nos. 5,982,819 and 5,940,019. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Womack et al (US 5,982,819) in view of Macjima (US 5,940,019).

Claim 20.

Womack et al discloses a digital tuner (see Fig.4), comprising:

a first plurality of digitizers (409), each digitizer being configured to receive a plurality of carrier signals and comprising:

a variable gain amplifier (425) configured to amplify the plurality of carrier signals, the variable gain amplifier being set as a function of the plurality of carrier signals received at the each digitizer, and

an analog-to-digital (A/D) converter (409) operatively coupled to an output of the variable gain amplifier and being configured to convert the amplified plurality of carrier signals to a digital stream of data.

But Womack et al fails to teach disclose a second plurality of receiver front-ends, each comprising a scaler to receive a digital stream of data and dynamically scale the digital stream of data to an essentially same peak magnitude.

Macjima teaches a scaler (22) coupled to the output of an A/D converter (21) to assure full-scale data at any desired level of the analog input signal. See col. 5, line 63 ~ col.5, line 30. Thus, it would have been obvious to one skilled in the art at the time the invention was made to connect a scaler to each output of the A/D converter (409) of Womack et al for the purpose of providing full-scale data at any level of respective carrier signals inputted to the A/D converters, as taught by Macjima.

Claim 21.

Womack et al shows that the number of digitizers (i.e., 2) differs from the number of receiver front-ends (i.e., 4).

Claim 22.

Womack et al shows that each receiver front-end further comprises:
a baseband converter (411) operatively coupled to the scaler and being configured to receive the scaled digital stream of data and digitally down-convert the scaled digital stream of data to baseband orthogonal component streams.

Claim 23.

The advanced digital signal processor (405) reads on a plurality of filtering and decimation pipelines operatively coupled to the baseband converter and being configured

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to receive the baseband orthogonal component streams and process the received baseband orthogonal component streams.

Claims 24-26.

Though not described, it is well established that a digital signal processor uses a plurality of clock domains via frequency divider and/or multiplier to provide various clock signals needed to process signals.

4. Claims 1-19 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KEVIN KIM
PATENT EXAMINER

Kim / Kim 4/3/06